

DOCUMENT RESUME

ED 068 049

HE 003 494

AUTHOR Davidovicz, H. M.
TITLE Pass-Fail Grading - A Review.
INSTITUTION Hofstra Univ., Hempstead, N.Y. Center for the Study
of Higher Education.
PUB DATE Jul 72
NOTE 11p.; Abstract and Reviews of Research in Higher
Education, Number 17

EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS *Grades (Scholastic); *Grading; *Higher Education;
*Literature Reviews; *Pass Fail Grading

ABSTRACT

This review presents a sample of the literature on pass-fail grading that was written between 1968 and 1971. The review leads to the following conclusions: (1) Students do not take pass-fail courses in order to avoid evaluation, but once having taken them their performance in both those courses and in traditionally graded courses declines; (2) Students do not take pass-fail courses to explore areas outside of their own major, but rather do so in order to make things easier for themselves in terms of course work; (3) Freshmen suffer most academically from taking pass-fail grades and so they should not be permitted the option or they should receive special guidance when they elect to do so; (4) The elimination of failing grades on transcripts is being practiced more widely than previously; (5) Most schools do not have major problems with pass-fail grading because they offer it only as a limited option; (6) While students who were graded on the basis of pass-fail can transfer to other institutions and can get accepted to graduate schools, they are less likely to get into the school of their choice.
(Author/HS)

CENTER FOR THE STUDY OF HIGHER EDUCATION

HOFSTRA UNIVERSITY

ABSTRACTS AND REVIEWS OF RESEARCH IN HIGHER EDUCATION, NUMBER 17

July 1972

Pass-Fail Grading - A Review

H.M. Davidovicz

The following review represents a sample of the literature on pass-fail grading that was made available between 1968 and 1971. It is designed to supplement a previous review dealing with grades and grading systems (Yuker, 1969). In his review of the literature Yuker concluded that although not enough research was available to permit final conclusions to be drawn, an increasing number of universities were adopting limited pass-fail options even though few of them used pass-fail grades exclusively. The issue Yuker found to be most serious was that graduate and professional schools preferred traditional grading systems for selection of students and that students with all pass-fail grades "tend to be discriminated against."

While the concept of pass-fail courses is rather old, its widespread acceptance [Burwen (1971) estimated that currently about 67.5 percent of all institutions use some sort of non-traditional grade] is a recent innovation. Furthermore, the innovation of eliminating all failing grades is beginning to emerge. Several authors have investigated the procedures used in pass-fail grading (Bevan, D'Andrea, Moore, Ruller and Cate 1969; Simpson, Quann, King, Shantz and Moen 1970; Quann, 1970; Johnson, 1970; and Burwen, 1971). Usually students take about one pass-fail course per semester. In most cases the student has to demonstrate good academic ability before he can utilize this option. Furthermore, the pass-fail course cannot be in the student's major area. As is reported by Simpson, *et al.* (1970), a failing grade does not affect the grade point average in about half the schools they surveyed. One procedure, which has not been adopted as widely as the others, is to eliminate dual grading standards by having instructors submit letter grades for all students and then having the registrar convert these to pass-fail grades (Johnson, 1970). (This has the fortuitous advantage of facilitating research on the subject of pass-fail grading).

Bevan *et al.* (1969) reported that those who favor pass-fail grading argue that it relieves the pressure on students and channels them to learning by making it easier to take courses they would not have taken otherwise. Also, those who argue against it claim that students take advantage of it by not working as hard and that many administrative problems arise with respect to such things as the dean's list, academic probation, academic suspension, computation of GPA, admission to graduate and professional schools, and admission of transfer students. As will be demonstrated, these are not areas of major concern to those

institutions that operate with a limited pass-fail option, though they are for those institutions that are totally on pass-fail. But, those that operate totally on pass-fail have suggested some solutions.

Hypotheses and Problems in the Research

Research in the area of pass-fail grading has not progressed much since 1967. Weems *et al.* (1971) found that 85 percent of the institutions with pass-fail options had no evaluative data on their programs. The majority of the literature reports opinions and offers little substantiating data. From a research point of view, the pass-fail option is a difficult independent variable to manipulate (Stallings, Smack, and Leslie, 1968). The criterion problem, of which variables can be measured to get at the consequences of selecting a pass-fail option, seems to be primary. There seems to be self-selection as to which students elect the pass-fail option. This, however, has yet to be substantiated with data. To date the criteria used to measure the effects of pass-fail grading have been either grade point average or grades in pass-fail courses. As will be demonstrated, these two measures have yielded some facts that are disappointing to advocates of pass-fail grading.

Characteristics of Pass-Fail Students

Stallings, Wolff, and Moehr (1969) explored the possibility that students who were high in "fear of failure" elect a pass-fail option, regardless of their interest in the subject matter, in order to avoid an undesirable test experience. They studied 83 education majors from the University of Illinois. The sample was divided into those students who took their course work under an A to F grading system and those who were enrolled for pass-fail credits. While the authors expected that the pass-fail students would have the greatest amount of test anxiety as measured by the Test Anxiety Questionnaire, they found no differences between groups. They also found that the pass-fail sample showed a higher GPA and carried heavier course loads. Since the authors also found no difference between the groups in their reasons for choosing pass-fail courses this would not indicate that people who elect pass-fail courses do so in order to avoid evaluation.

Another study designed to get at attitudes associated with advocating pass-fail grading was carried out by Priest (1971). He hypothesized that students who favored non-competitive grading also favored both less competition in testing and non-competitive peer interactions. He further hypothesized that those students who had not achieved high grades in past competition would dislike competing. In order to test his hypotheses a questionnaire was administered to a sample of 433 students.

The majority of those sampled favored a pass-fail grading option. Those who favored pass-fail grading aspired to high grades and expressed a negative attitude towards grading, as being competitive. It was found that those who favored pass-fail grading also tended to believe that competition for grades does not promote learning, and that there is too much competition for high grades. In addition, these same people reported that they did not enjoy studying, and preferred evaluation of their performance on original projects. In contrast, those who favored traditional grading believed that competition stimulates learning, they wanted to be graded on their work and went to their instructors for answers to questions. In general there appeared to be a clear distinction between the types of students who favored pass-fail grading and those who did not. But, significantly, neither attitude was closely related to either aspirations for grades or actual school achievement.

Achievement Under Pass-Fail Grading

A study carried out at Knox College (Helville and Stamm, 1967), which examined the grades of students enrolled in pass-fail courses, found that GPAs increased directly in proportion to the number of pass-fail courses the students took, and that the mean academic performance within pass-fail courses was lowered.

A study with conflicting results was done by Gold, Reilly, Silberman, and Lehr (1971) at Cortland College. They used samples of freshmen and juniors matched for GPA, SAT scores, and sex. Grades were submitted for all students although some were converted to pass-fail grades. The experimental subjects were permitted to take pass-fail courses while control subjects who wanted to take the same courses on a pass-fail basis were denied the opportunity. The authors found that the mean GPA for both freshmen and juniors was significantly lower for those students who took pass-fail courses. The experimental subjects demonstrated no compensatory improvement in the non-pass-fail courses, and even after they returned to a system of traditional grading they continued to get significantly lower grades than the control subjects. Somehow, in this case, taking pass-fail courses had an adverse effect on college achievement.

The results of the two studies are not directly comparable because the Melville and Stamm (1967) study did not select subjects as carefully or match them. Had they compared pass-fail with non-pass-fail students, they might have yielded results similar to those found by Gold, Reilly, Silberman and Lehr (1971).

Studies done by Sgan (1970) and by Quann (1971) lend further support to the argument that students do not perform well under pass-fail grading. Quann reported that students at Washington State

University who took either pass-fail courses or traditional courses did not differ significantly in GPA initially but, after the courses were completed the regularly enrolled students received five times as many A's and 50 percent more B's than pass-fail students. Sgan found that at Brandeis University freshmen, sophomores, and juniors received significantly poorer grades under pass-fail than they did under letter grading. There were no significant differences between seniors who either took or did not take pass-fail courses. Since first year students did most poorly, Sgan concluded that, "There would seem to be some need for special preparation and attention to first year students if pass-fail is opened to them as an option. Merely allowing it may not be a responsible educational effort (p. 643)."

Attitudes in Pass-Fail Grading

It is generally agreed that pass-fail grading causes students to report a reduction in the amount of tension they perceive. Stallings and Leslie (1970) were particularly critical of the effects of regular grading. They concluded that:

The undergraduate perceives grades as that proverbial sword hanging over his head which forces him to study content he otherwise might not study. The power of 'the grade' is strong enough to restrict his studying to material which he anticipates will be on tests. In most cases this material is factual, regardless of the level of the instructor's objectives. If he should happen to stray from factual material and become somewhat imaginative, the student expects his efforts to go unrewarded,...Once a grade is received, it is not perceived as feedback... Pressure mounts and can lead to cheating. Cheating is perceived as a side-effect behavior, partly attributive to the pressure to obtain high grades (p. 67).

They said strongly that students should be allowed to take a pass-fail alternative when they desire to do so and that if graduate schools complain, they should be defied.

Those who have investigated attitudes towards the pass-fail system (Sgan, 1969; Karlins, Kaplan and Stuart, 1969; Cromer, 1969; and the Office of Institutional Educational Research at Washington University, 1970) have consistently found that students are overwhelmingly in favor of it. There is a question whether students work as hard for pass-fail grades as they do for numerical grades, but the evidence seems to indicate that they do not. Karlins, et al. (1969), for example, found that with numerical grades students completed

80 percent of their readings and attended 85 percent of the lectures, while pass-fail students reported that they had done 61 percent of the readings and attended 74 percent of the lectures. While some researchers reported that students explored courses outside of their own major (Sgan, 1969) others said they did not (Johnson, 1970; Weems et al., 1971). This could be a function of varying student characteristics at the different universities. While it is difficult to draw a firm conclusion, on the whole it seems that students do not take pass-fail courses to explore other areas, but rather they use it to relax in some of their course work (Cromer, 1969; and Weems, et al., 1971).

Problems Associated with Pass-Fail Grading

While graduate and professional schools prefer applicants with traditionally graded transcripts, a survey done by Goldstein and Tilker (1969) on institutions of higher learning in New York State indicated that graduate schools preferred a four point or less grading system (i.e. pass-fail or a similar system) for their own internal purposes. Professional schools, on the other hand, preferred a five or more point scale (i.e. traditional A to F grading) for grading their students. Warren (1971) claimed that grades fulfill an administrative rather than an educational purpose, but that administrative needs such as awarding financial aid or honors are legitimate educational purposes. He said that graduate and professional schools are the primary beneficiaries of grades for selection, and thus they are the ones most concerned about departures from traditional grading patterns.

Needham (1970) of Simmons College quoted the Law School Admissions Test Council as saying that, "College grades make a contribution to the prediction of law school grades that is not supplied by the Law School Admission Test." In his own research at Simmons College, Needham asked students if they thought the pass-fail grades on their transcripts had an adverse effect on their applications to graduate schools, transfer applications, employment applications, etc. The number of students who perceived unfavorable reactions against their transcripts were relatively small in all cases except transfer students. So it seems that transfer students perceive themselves to be most negatively affected by pass-fail grading.

A survey done by the American Association of College Registrars and Admissions Officers (1971) found that 44 percent of the institutions reported that they disregard the pass-fail grades of transfer students. Another 28 percent have yet to establish a policy, 21 percent request "further information," and seven percent assign an arbitrary quantitative value to the grades. A total of 26 percent of the graduate schools that responded indicated that admission to their programs is either jeopardized or delayed by the presence of a substantial number of pass-fail credits. This indicates that the effects of pass-fail grading on transfer students

is unclear but that graduate school applicants experience some harmful effects.

The results of a survey done by Rossman (1970) are in accord with these findings. His sample consisted of 45 schools which were frequently attended by Macalaster College graduates. This small sample had 60 percent of the administrators indicating that the reputation of the school would be considered in admission decisions. It was also found that 75 percent of the administrators indicated that achievement test scores would take on great importance for students with many pass-fail grades. He reported that students who have 75 percent or more of their grades in traditional formats should not experience any difficulty in admissions. So it would seem that students who do not do well on standardized achievement tests, and students who come from schools that do not have established reputations suffer most from pass-fail grading.

Only a small number of colleges are run completely on a pass-fail system, and very few students graduate with more than ten percent of their grades in pass-fail form (Hofeller, 1971; Warren, 1971). It would seem that the majority of students who have a high percentage of pass-fail grades and apply to graduate schools are admitted but perhaps not always to their first choice of a school. The effect on loss of fellowships and scholarships, however, has not yet been determined (Warren, 1971).

As far as honors are concerned, Phi Beta Kappa (1969) reported that about 60 percent of those schools that responded to their questionnaire kept their usual grades in addition to indicating whether the course was passed or failed, and about 80 percent ranked students in their respective classes by GPA. About 64 percent of the Phi Beta Kappa chapters reported no problems with pass-fail grading, another 12 percent indicated problems, and 24 percent were not sure as yet. Thus, pass-fail grading was not a major problem for these schools.

Solutions

One method of dealing with pass-fail grading was described by Tragesser et al. (1968). He suggested that "College Level Examinations" which measure achievement in specific course areas might be used when transferring credits is a problem. Each school would develop its own norms. Schools such as the University of California at Santa Cruz and Raymond College, which normally assign pass-fail grades, provide letter grades in science courses for premedical students at their own request. Other schools such as Goddard College and Nasson College issue "descriptive analysis of course work for transferring students."

Massey, et al. (1969) described a method used at Ohio Northern University (where one-third of a student's work goes ungraded and GPAs

are based only on graded courses) for determining such things as dean's list, eligibility for honor societies, graduation honors, class rank, etc. Instructors fill out separate honors recommendations which are used only for internal decision making and are not part of the student's permanent record. A similar method is used at Tarkio College (Aven and Breazier, 1969) where student teaching grades for education majors are pass-fail. There, the student's supervisor writes an evaluation which becomes part of the student's academic credentials. Of the school superintendents who receive these written evaluations 81 percent said that they were sufficient. These students do receive letter grades in other courses.

The Department of Vocational Teacher Education at the University of Massachusetts, whose students spend 50 percent of their time on non-course experiences, uses a method of written evaluation to record individual student progress when traditional grading is not feasible (Johnson and Lauraesch, 1969). Leiseming et al. (1970) described another alternative. At Westminster College, where a four-point grading system was adopted in 1965, academic progress is assessed by comparing hours earned each semester with a norm of 15.5 hours. No GPA is obtained but students are ranked via this procedure. It can be seen that for schools on a total pass-fail program the most practical solution is to keep a dual record of grades so that traditional transcripts are available on student request. Another possibility is to include descriptive summaries of course work in the student's academic record. There is no need to resort to either of these procedures if only a limited pass-fail option exists.

Conclusions

This review of the recent literature on pass-fail grading leads to the following conclusions.

1. Students do not take pass-fail courses in order to avoid evaluation, but once having taken them their performance in both those courses and in traditionally graded courses declines. (Sgan, 1970; Gold et al., 1971; Quann, 1971).
2. Students do not take pass-fail courses to explore areas outside of their own major, but rather do so in order to make things easier for themselves in terms of course work. (Johnson, 1970; Weems et al., 1971).
3. Freshmen suffer most academically from taking pass-fail grades and so they should not be permitted the option or they should receive special guidance when they elect to do so. (Quann, 1971).
4. The elimination of failing grades on transcripts is being practiced more widely than previously. (Simpson et al., 1970).

5. Most schools do not have major problems with pass-fail grading because they offer it only as a limited option. (Needham, 1970).

6. While students with a substantial number of credits in pass-fail courses can transfer to other colleges or be admitted to graduate and professional schools, they are less likely to get into the school of their choice. The possible detrimental effect on financial aid for them has not yet been determined. (Needham, 1970; Rossman, 1970; AACRAO, 1971).

7. Double bookkeeping systems or written evaluations can serve to supplement transcripts of students who have a large percentage of pass-fail courses. (Tragesser et al., 1968; Aven et al., 1969; Johnson et al., 1969; Massey et al., 1969; Johnson, 1970).

8. When students with many pass-fail grades apply to graduate or professional schools, the schools tend to give more weight to scores on achievement tests. (Rossman, 1970).

9. Institutions are still not doing the required research or using adequate research techniques in research regarding pass-fail grading.

References

- The American Association of College Registrars and Admissions Officers, Survey of Grading Policies in Member Institutions, 1971.
- Aven, Samuel D., and Breazier, Eddon. Pass-fail credit for student teachers viewed by Missouri superintendents. School and Community, 56(3), 1969, 47.
- Bevan, John E., D'Andrea, John E., Moore, James, Ruller, Frances E., and Cate, Gerald. Transcript Adequacy - P's, F's and other letters. College and University, 44(4), 1969, 502-503.
- Cromer, Ward. An empirical investigation of student attitudes toward the pass-fail grading system at Wellesley College. College Student Personnel Abstracts, 5(2), 1970, 189.
- Gold, Richard M., Reilly, Anne, Silberman, Robert, and Lehr, Robert. Academic achievement declines under pass-fail grading. The Journal of Experimental Education, 39(3), 1971, 17-21.
- Goldstein, Kenneth M., and Tilker, Harvey A. A Review of Grading System Practices in the Higher Education Institutions of New York State. New York, 1969, 81 pps.
- Helville, George L., and Stamm, Eleanor. The Pass-Fail System and the Change in the Accounting of Grades on Comprehensive Examinations at Knox College. Galesburg, 1967, 25 pps.
- Hofeller, Margaret A. Survey of U.S. Graduate School Attitudes Toward Non-Traditional Grading Systems. New York, 1971.
- Johnson, Jack T. Evaluate program, not grading. College and University Business, 49(3), 1970, 77-78.
- Johnson, Roy A., and Lauroesch, William. Pass-fail system with options for the learner. American Vocational Journal, 44(6), 1969, 16-18 and 65.
- Karlins, Marvin, Kaplan, Martin, and Stuart, William. Academic attitudes and performance as a function of differential grading systems: An evaluation of Princeton's pass-fail system. Journal of Experimental Education, 37(3), 1969, 38-50.
- Leiseming, Lyle B., Elliott, Carine, Fuller, Gate L., King, Horace C., Warren, Richard J., and Parrish, James B. Evaluating evaluations - grading practices. College and University, 45(4), 1970, 349-359.

- Massey, G. Harold, D'Andrea, John E., Moore, James, Papaulos, George and Williams, Jack N. Transcript adequacy - P's and F's and other letters. College and University, 44, 1969, 520-527.
- Needhan, J. G. Honors-Pass-Fail: A Report. Simmons College, 1970.
- Office of Institutional Educational Research at Washington University. Pass-Fail Evaluation: Phase II: Questionnaire Analysis. Seattle, 1970, 30 pps.
- Pass-Fail Study Committee, Report to the Senate, Washington, D.C., Phi Beta Kappa, 1969.
- Priest, Robert F. Why college students favor grading reforms. The Journal of College Student Personnel, 12(2), 1971, 120-125.
- Quann, Charles J. The Pass-Fail Option: Analysis of an Experiment in Grading. Athens, Ohio, 1971, 18 pps.
- Quann, Charles J. Survey shows variations in grading trends. College and University Business, 49(3), 1970, 77-78.
- Rossman, Jack E. Graduate School Attitudes to S-U grades. Educational Record, 51(3), 1970, 310-313.
- Sgan, Mathew R. Letter grade achievement in pass-fail courses. The Journal of Higher Education, 41(8), 1970, 638-644.
- Sgan, Mathew R. The first year of pass-fail at Brandeis University: A report. The Journal of Higher Education, 40(2), 1969, 135-144.
- Simpson, Claude, Quann, Charles, King, Horace, Shantz, Howard, and Moen, Carlton. Pass-fail - What are the trends? College and University Business, 49(3), 1970, 78-79.
- Stallings, William M., and Leslie, Elwood K. Student attitudes towards grades and grading. Improving College and University Teaching, 18(1), 1970, 66-68.
- Stallings, William M., Wolff, Joseph L., and Moehr, Martin L. Fear of failure and the pass-fail grading option. The Journal of Experimental Education, 38(2), 1969, 87-91.
- Stallings, William M., Smack, H. Richard, and Leslie, Elwood K. The pass-fail grading option, School and Society, 96(2305), 1968, 179-180.

Tragesser, Eugene F., Arbolino, Jack, Huntly, Stirling, Melville, George S., Smith, Robert E., and Montgomery, Isla. Are new developments in achievement testing an adequate answer to pass-fail grading systems? College and University, 43(4), 1968, 565-567.

Warren, Jonathan R. College Grading Practices: An Overview, Washington, D.C., 1971, 29 pps.

Weems, John E., Clements, William H., Quann, Charles J., Smith, K., and Schefelbein, Barbara E. Pass-fail; Were the hypotheses valid? College and University, 46, 1971, 535-556.

Yuker, Harold E. Grades and grading systems, Higher Education Research Abstracts No. 6, Hempstead, New York, 1969.